

Appl. No. 10/730,143  
 Reply to Office Action of June 12, 2007

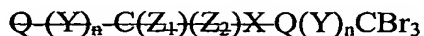
**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended): A photothermographic material comprising a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent, a compound represented by the following formula (H) and the amount of Formula (H) of from  $10^{-5}$  to  $10^{-4}$  mol to  $1-0.3$  mol/ a non-photosensitive organic silver salt of 1 mol:

Formula (H)



wherein Q represents ~~an alkyl group~~, an aryl group, or a heterocyclic group; Y represents ~~a divalent connecting group~~ a sulfonyl group; n represents 0 or 1; ~~Z1 and Z2~~ each represent a halogen atom; and ~~X represents a hydrogen atom or an electron-withdrawing group,~~

and a binder on at least one surface of a support, wherein silver iodide is contained in the photosensitive silver halide in an amount of 70 % to 100 % by mole,

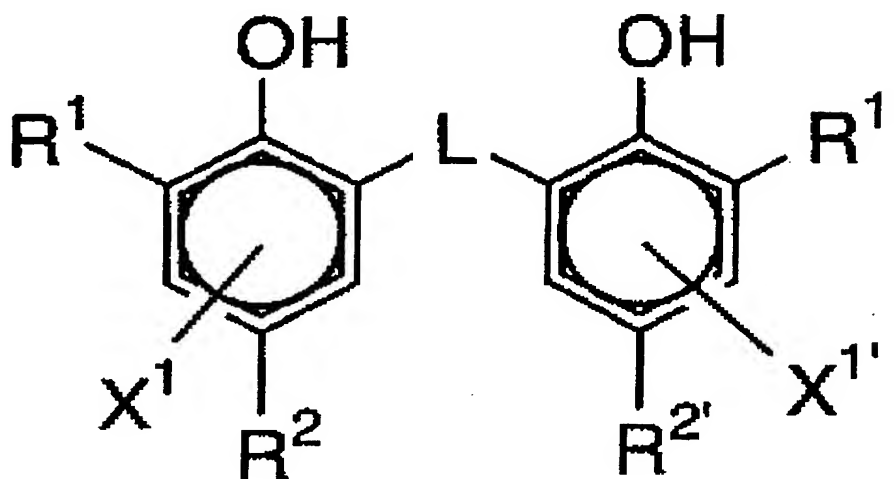
and a phthalazine compound,

and the reducing agent contains a compound represented by the following formula (R-1):

Formula (R-1)

Appl. No. 10/730,143

Reply to Office Action of June 12, 2007

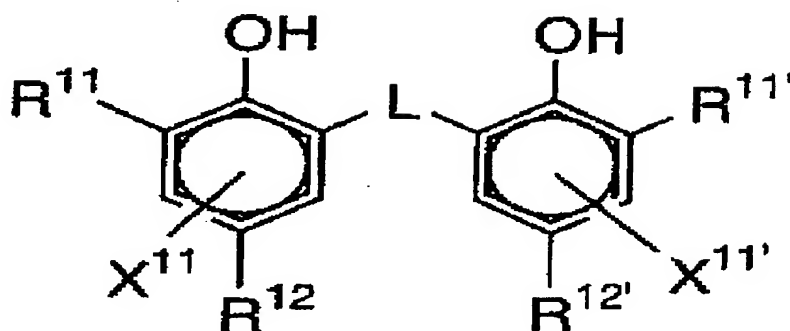


wherein  $R^1$  and  $R^{1'}$  each independently represent ~~an alkyl group having 3 to 20 carbon atoms, in which a carbon atom bonding to the benzene ring is secondary or tertiary a~~  
~~t-butyl group, an isopropyl group, or a 1-methylcyclohexyl group~~;  $R^2$  and  $R^{2'}$  each  
 represent a methyl group; L represents an ~~S~~ group or a ~~CHR<sub>3</sub>~~ group, in which ~~R<sub>3</sub>~~  
~~represents a hydrogen atom or an alkyl group having 1 to 20 carbon atoms~~ unsubstituted  
methylene group or methylene group substituted by a methyl group, a propyl group, or  
an isopropyl group; and  $X^1$  and  $X^{1'}$  each independently represent a hydrogen atom or a  
 group capable of being substituted on the benzene ring; and

the reducing agent includes a second compound selected from formula (R-2) or  
 from formula (R-3)

Appl. No. 10/730,143  
 Reply to Office Action of June 12, 2007

Formula (R-2)

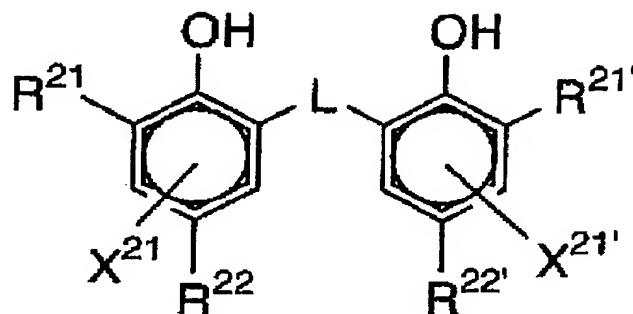


wherein R<sup>11</sup> and R<sup>11'</sup> each independently represent ~~an alkyl group having 3 to 20 carbon atoms, in which a carbon atom bonding to the benzene ring is secondary or tertiary a~~  
t-butyl group, an isopropyl group, or 1-methylcyclohexyl group; R<sup>12</sup> and R<sup>12'</sup> each  
 independently represent ~~an alkyl group having 2 to 20 carbon atoms an ethyl group, a~~  
propyl group, or an isopropyl group; L represents an ~~S~~ group or a ~~CHR<sup>13</sup>~~ group, in  
 which R<sup>13</sup> represents a hydrogen atom or an alkyl group having 1 to 20 carbon atoms  
unsubstituted methylene group or methylene group substituted by a methyl group, a  
propyl group, or an isopropyl group; and X<sup>11</sup> and X<sup>11'</sup> each independently represent a  
 hydrogen atom or a group capable of being substituted on the benzene ring;

Formula (R-3)

Appl. No. 10/730,143

Reply to Office Action of June 12, 2007



wherein  $R^{21}$  and  $R^{21'}$  each independently represent a methyl group or an alkyl group having 2 to 20 carbon atoms, in which a carbon atom bonding to the benzene ring is primary ethyl group;  $R^{22}$  and  $R^{22'}$  each independently represent an alkyl group having 1 to 20 carbon atoms a methyl group, an ethyl group, a propyl group, or an isopropyl group; L represents an S group or a CHR<sub>23</sub> group, in which  $R_{23}$  represents a hydrogen atom or an alkyl group having 1 to 20 carbon atoms an alkyl-substituted unsubstituted group or an unsubstituted group; and  $X^{21}$  and  $X^{21'}$  each independently represent a hydrogen atom or a group capable of being substituted on the benzene ring.

2. (Canceled)

3. (Original): The photothermographic material of claim 1, wherein the silver iodide is contained in the photosensitive silver halide in an amount of 90 % to 100 % by mole.

4. (Original): The photothermographic material of claim 1, wherein the

Appl. No. 10/730,143  
Reply to Office Action of June 12, 2007

photosensitive silver halide has a mean grain size of 5 nm to 80 nm.

5. (Original): The photothermographic material of claim 1, wherein the photosensitive silver halide has a mean grain size of 5 nm to 40 nm.

6. (Canceled).

7. (Canceled).

8. (Original): The photothermographic material of claim 1, which is exposed with laser light.

9. (Original): The photothermographic material of claim 8, wherein the laser light has a light emission peak intensity in a range of 390 nm to 430 nm.

10. (Original): The photothermographic material of claim 1, wherein a characteristic curve of the photothermographic material has a gamma in a range of 2 to 5.

Claims 11-19 (Canceled).